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TRAIL & LANDSCAPE

A Publication Concerned With Natural History and Conservation

The Ottawa Field-Naturalists' Club

TRAIL & LANDSCAPE

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The Ottawa Field-Naturalists' Club

— Founded 1879 —

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Objectives of the Club: To promote the appreciation, preservation and conservation of Canada's natural heritage; to encourage investigation and publish the results of research in all fields of natural history and to diffuse the information on these fields as widely as possible; to support and co-operate with organizations engaged in preserving, maintaining or restoring environments of high quality for living things.

Club Publications: THE CANADIAN FIELD-NATURALIST, a quarterly devoted to reporting research in all fields of natural history relevant to Canada, and TRAIL & LANDSCAPE, a quarterly providing articles on the natural history of the Ottawa Valley and on Club activities.

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Welcome New Members

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Dave Caron & Family
Darlene Chamberlain
Melissa Clark
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Elizabeth Fournier
Joan Haire
Gordon Johnston
Mary Louise Mongeau
Nadine Perras & Family
Victoria Putinski
Wendy Quirt & Family
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Jessica Rebecca Taves & Family

Ontario

Arthur Goldsmith

British Columbia

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Henry Steger
Chair, Membership Committee
August 2015

The William J. "Bill" Cody Fern Trail

Frank Pope

This new Fern Trail was dedicated at a ceremony in the Backyard Garden part of the Fletcher Wildlife Garden on May 31, 2015. The whole Cody clan was in attendance.

A fern trail at the Fletcher Wildlife Garden was first established in the Ash Grove. When it was just getting underway, along came the Emerald Ash Borer. The ash trees were all cut down and the fern habitat was ruined. To the rescue came Lis Allison and her crew. They created a new fern trail at the east end of the Backyard Garden which was the site for the dedication on May 31.

But why is it called the William J. "Bill" Cody Fern Trail?

When I became active on the Conservation Committee in the 1970s, I wondered how the Club was run. It turned out that the Club was actually run by Lois and Bill Cody from the basement of their residence. Everything was there: accounting ledgers, cabinets of files, shelves of Club publications and Club articles for sale.

In the 1980s I knew him in his capacity as Treasurer and Business Manager for the Club. He would deny being Business Manager for the Club, claiming to only to manage *The Canadian Field-Naturalist* (*CFN*), but he still looked after Club business.

In the 1990s I worked with him in his capacity as Business Manager for the *CFN* and realized what a vital role he played supporting Francis Cook the editor. Bill's youngest daughter, Leslie, was a great help to him. She typed his manuscripts, proofread, kept the *CFN* mailing list and prepared the index. Later, I had the pleasure of working with Leslie on the index.

Bill hardly missed a meeting of the Council.

It is fitting for the Club to recognize Bill for the outstanding contribution he made to the operations of the Club over many years. But why choose a fern garden?

It seemed appropriate to connect Bill with ferns. He wrote two books about ferns: "Ferns of the Ottawa District" in 1978 and "Ferns and Fern Allies" in 1989. He led many fern trips for our Club. In addition he wrote six papers on the subject.

Bill was also an outstanding botanist and deserved to be recognized for that. He was an authority on plants in the Yukon, tracking the movement northward of plants responding to climate change. He wrote 160 articles and 160 book reviews related to botany and also described 51 new taxa or hybrids.

This beautiful fern trail is our tribute and thanks to Bill.

The Rainbow Darter *Etheostoma caeruleum* Storer, 1845 A Fish New To The National Capital Region

Adrienne Lewis[1], *Justin Robert*[1], *Brian W. Coad*[2] *and Noel Alfonso*[2]

The fish fauna of the National Capital Region (NCR) comprises about 88 species (*www.briancoad.com/NCR/ContentsNCR.htm*). Occasionally new records are found and one is documented here, following the format of that website. A key to identify the darters in the NCR is appended.

Rainbow Darter / Dard arc-en-ciel
Etheostoma caeruleum Storer, 1845

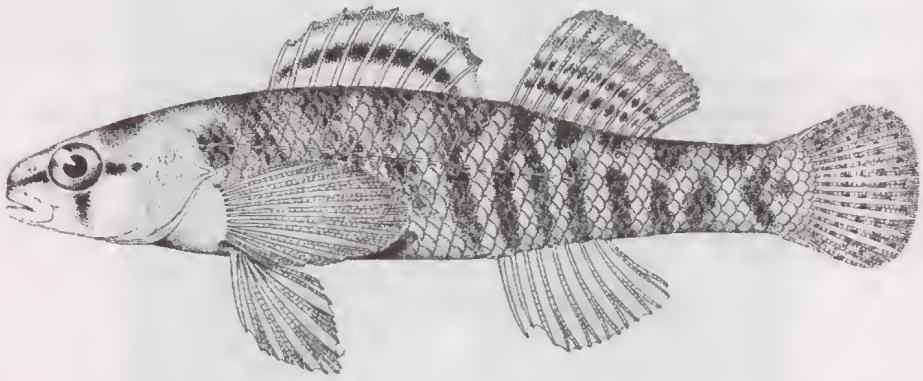

Figure 1. Line drawing of a Rainbow Darter.

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[2]Canadian Museum of Nature, Ottawa, Ontario K1P 6P4 (*bcoad@mus-nature.ca, nalfonso@mus-nature.ca*).

Taxonomy
Other common names include blue darter, banded darter and soldier darter.

Key Characters
See also the Key to Darters below. It is distinguished from other darters in the NCR by having the anal fin smaller than the soft dorsal fin, the snout and upper lip are joined (i.e., the premaxillaries are not protractile), the belly is scaled, dorsal fin spines are 8-13, usually 9-11, dorsal soft rays are 10-15, usually 12-14, lateral scales are 36-57 with 12-39 pored, and males are colourful with green, blue and orange on the head, body and vertical fins.

Description
The anal fin has two spines and 5-9, usually 6-8, soft rays. Pectoral fin rays are 10-15, usually 13. The operele is scaled but the cheek and breast are usually naked. Dorsal fin spines are short, about eye diameter or less. Tubercles are present on the rear half of the belly and the lower half of the caudal peduncle in spawning fish.

Colour
The non-breeding male and female colour is a light green with green-brown or black bars and a yellow to white belly, and varies with the habitat. The female has a red-based and blue-margined spiny dorsal fin. The back has 3-12 saddles and the flank 8-14 bars, the latter most developed over the anal fin and on the caudal peduncle, where there are 6-7. Three bars radiate from the eye but are diffuse. Males are brilliantly coloured throughout the year, especially in the breeding season, with blues and reds on the body, head and fins, and orange on the branchiostegal membranes. Some scales have red margins. Bars are dark blue-green on the flank and the spaces between bars are red-orange. Tail bars encircle or almost encircle the body. The spiny dorsal fin is usually red at the base and blue at the edge, margined with greenish-blue. The soft dorsal fin is blue-green at the base and edge with an intervening red-orange stripe. The anal fin is blue-green with a central red spot or bars. The pelvic fin is blue-green with anterior ray tips whitish.

Size
Reaches 7.7 cm total length.

Distribution
Found from the southern Great Lakes basin from New York to Minnesota, in the Ohio and Mississippi river basins and southwards to Louisiana and Alabama. In Canada, previously known only in southwestern Ontario in tributaries to lakes Ontario, Erie and southern Huron (Fig. 4). The NCR record is from the Jock River just downstream from the Riverbend Golf Course at 45°8'6.4212"N, 75°55'55.9308"W (Figs 2 and 3). The fish were caught on 1 June 2015 by

electrofisher between 13:25 and 14:39. One specimen, 59.8 mm total length, is catalogued in the Canadian Museum of Nature, Ottawa under CMNFI 2015-0060.

Figure 2. Capture site marked in centre of image to right of Franktown Town..

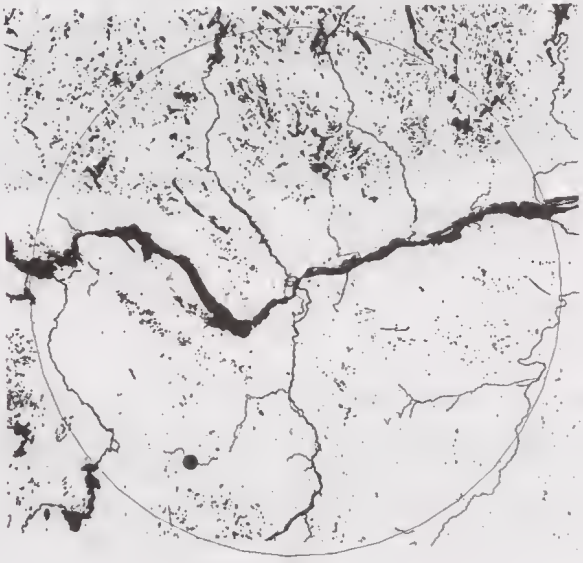

Figure 3. Distribution within the National Capital Region (at lower left).

Origin

This species may be spreading from southwestern Ontario eastwards, whether by natural means or aided by bait fishing releases. The fact that the Hornyhead Chub (*Nocomis biguttatus*) was also captured at this locality on 25 June 2004 (Coad and Alfonso, 2005) suggests that the darter is a bait fish release.

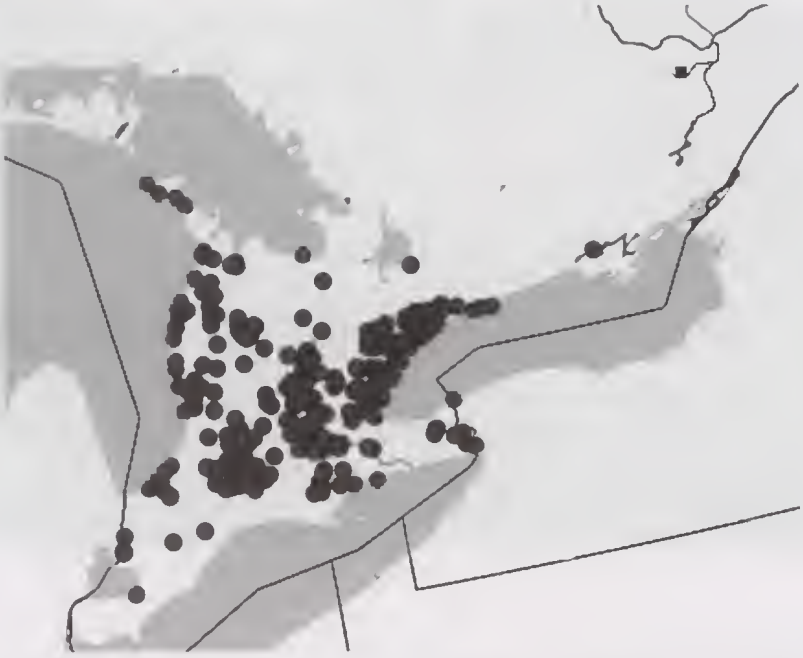

Figure 4. Distribution in southern Ontario based on records from the Canadian Museum of Nature, Ottawa and the Royal Ontario Museum, Toronto (circles) with Jock River locality top right (square).

Habitat

Rainbow Darters are found in clear, sand- or gravel-bottomed streams, predominately in riffle areas, with moderate flow, and with little vegetation or near emergent vegetation. The Jock River location has riffles, pools and some bedrock.

Age and Growth

Life span may be up to 5 years but sexual maturity can be attained at one year.

Figure 5. Capture site on Jock River, 6 June 2015.

Food

Food includes aquatic insects such as midges, blackflies, caddisflies and mayflies, copepods, snails, small crayfish, molluses, and fish eggs taken particularly from rock surfaces in the morning and evening.

Reproduction

Males establish small territories at the foot of riffles in spring and early summer, March to June. They display their bright colours with fins erect and have stylised but non-injurious fights with other males, sometimes becoming so engrossed in chasing away other males that they lose their mate. The females are courted. When ready to spawn at water temperatures of 17-18°C, a female enters the gravel head first, to bury the ventral part of the body, the male lies over her with his tail region bent down parallel to hers, both fish quiver and about 3-7 orange to translucent eggs are released and fertilised. Smaller males, lacking the intense colouration of larger males, may dart in and try to fertilise eggs. They are known as sneaker males. The eggs are buried in the gravel and the female continues to spawn in different areas

with the same or different males over a period of several days. Up to 1462 eggs have been reported from a female but this is probably an overestimate and a number of about 125 eggs is more accurate. Eggs are up to 1.9 mm in diameter. After spawning the females remain in quieter pools below the riffles, an area also favoured by young fish.

Importance

It is relatively common in southern Ontario and is probably food for other fish species. This species has the distinction of being perhaps the most colourful Canadian fish (photographs are readily available online). It can be maintained in a well-aerated aquarium. Like other darters it is particularly sensitive to pollution and siltation and is therefore a good indicator of water quality.

Key to Darters in the National Capital Region

1. Anal fin large, its area about equal to or larger than soft dorsal fin; body elongate and rounded; midline of belly between and behind pelvic fins naked (females), or with enlarged scales (males) --> 2

Anal fin small, its area much less than soft dorsal fin; body more compressed than rounded; midline of belly between and behind pelvic fins scaled or not, but no enlarged scales --> 3

2. First dorsal fin spines 12-17, usually 14-16; lateral scale rows (**counted along mid-flank from head to tail**) 67-103, usually 77 or more; no deep groove between the snout and lip (premaxillaries not protractile) = *Percina caprodes* (Logperch/ Fouille-roche zébré) [widespread]

First dorsal fin spines 9-13, usually 10-12; lateral scale rows 43-61, usually 52 or less; a deep to weak groove between the snout and lip (premaxillaries protractile) = *Percina copelandi* (Channel Darter/ Fouille-roche Gris) [Quyon stream, Gatineau River]

3. Snout and upper lip separated by a groove (premaxillaries protractile); a single thin anal fin spine --> 4

Snout and upper lip joined, not separated by a groove (premaxillaries not protractile); two anal fin spines, the first thick --> 5

4. Infraorbital (**under the eye**) and supratemporal (**over back of head**) head canals not continuous; normally 6 pores or fewer on the infraorbital canal; 1-11, usually 9 or fewer, pores in the preoperculomandibular head canal (**canal runs from lower jaw onto the preopercle bone**); 9-15, usually 12 or fewer, dorsal fin soft rays; cheek (**area below and behind the eye**) and nape (**area behind the top of the head**) usually scaleless or with very few scales; usually 3-4 bars on the caudal fin

= **Etheostoma nigrum* (Johnny Darter/Raseux-de-terre noir) [widespread]

Infraorbital and supratemporal head canals continuous; normally 8 pores or more on the infraorbital canal; 9-13, usually 11, pores in the preoperculomandibular head canal; 10-17, usually 13 or more, dorsal fin soft rays; cheek and nape usually covered with scales; usually 5-8 bars on the caudal fin = **Etheostoma olmstedi* (Tessellated Darter/Raseux-de-terre gris) [widespread]

* Note: Head canals and pores are best seen in specimens injected by capillary action with the temporary stain methylene blue. These two species hybridize and some scientists regard them as a single species.

5. Cheeks and opercles scaled (may be obscured by skin); dorsal fin spines longer than eye diameter; soft dorsal fin rays 9-13, usually 10-11 = *Etheostoma exile* (Iowa Darter/Dard à ventre jaune) [widespread]

Cheeks and opercles not scaled; dorsal fin spines short, about eye diameter or less; soft dorsal fin rays 10-15, usually 12-14 --> 6

6. Dorsal fin spines 8-13, usually 9-11; gill membranes not obviously joined but meeting in a V over isthmus; males colourful with green, blue and orange on head, body and vertical fins; bars behind anal fin encircle, or almost encircle, the body = *Etheostoma caeruleum* (Rainbow Darter/Dard arc-en-ciel [Jock River]

Dorsal fin spines 5-10, usually 6-8; gill membranes broadly joined by a sheet of tissue covering isthmus but free from it; body with 9-13 dark bars not reaching down to belly = *Etheostoma flabellare* (Fantail Darter/Dard barré) [Québec streams]

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A Call Down the Path: Trail Marker Trees in Ontario

Paul O'Hara[1]

It was a couple of years ago. I forget what I was searching for now. Something tree-related—dreams of discovering more grainy black and white shots of loggers enveloped in Southern Ontario old growth. I was scanning the Niagara Falls online digital library when I saw a photograph that has been burned into my brain to this day. It was labelled, "The Old Indian Trail—Marker Tree, Townline Rd. (at Thorold-Stamford)."

Go check it out. It shows a mature, roadside White Elm (*Ulmus americana*) on the Haldimand Clay Plain near Thorold with its side branches pulled down, the trunk and main branches drawing the shape of an "M," the lateral branches forming the crown. Aboriginals had purposefully modified the tree at one time—early to mid 1800s, I would guess—to point along an ancient footpath. The tree was well known in the community, ravaged by Dutch Elm Disease in the early 70s, but saved as a snag until a windstorm brought it down December 28, 1982.

Wow, I thought, dumbfounded and flooded with questions. Where do I find out more about Indian trail marker trees? Are there more photos of tree markers I could find? Are there marker tees standing on the landscape of Southern Ontario today?

My first couple of questions would be answered with a little more surfing. I came across two links about tail marker trees, both from the United States. The first one is run by the Mountain Stewards (*mountainstewards.org*) of the Southern Appalachians, the second, a link to the Great Lakes Trail Marker Tree Society (*greatlakestrailtreesociety.org*) run by artist and trail marker tree researcher Dennis Downes[2] from Illinois. Both sites show numerous photos of trail marker trees

[1] *blueoak@sympatico.ca*, (905) 540-9963.

[2] Dennis Downes' book Native American Trail Marker Trees: Marking Paths Through the Wilderness is available from the Great Lakes Trail Marker Tree Society at *www.greatlakestrailtreesociety.org*. It is the first comprehensive book on trail marker trees ever published.

standing in the US today, but most of them didn't look like the Old Indian Trail Marker Tree in Thorold. Most were modified to point in one direction and, not surprisingly in the US, most of them were oak.

The "Mother of All Markers" in Kingsville near Point Pelee. Gerry Waldron and a White Oak marker pointing west along a trail that is documented on a map drawn by crown surveyor Patrick McNiff in the 1790s. There is little doubt this magical tree was marked by Aboriginals sometime in the 18th century. Photo by Paul O'Hara.

Downes' site dug deeper into the background on how marker trees were formed and provided tips on what constitutes a true trail marker tree (apparently, there is some debate over what constitutes a true marker as there are a lot of bad examples out there—folks calling any old misshapen tree a trail marker). True markers were modified near the ground. A sapling was bent over and its leader was tied down with rawhide, grapevine or secured with heavy rocks. The lateral branch pointing directly upwards was retained while the rest were removed. Over time the tree settled into the bend, the rawhide was removed or withered away, and a "nose" was often left to point the way. As the tree grew, the diameter of the main trunk remained larger than the lateral branch forming the crown. Other trees, like the branches on the Thorold marker, were just pulled down and secured. Either way, marker trees were meant to look very purposeful, distinguishing them from naturally bent trees.

I learned that marker trees were used by Aboriginals to point to all kinds of things: villages and camps, water sources and river fords, or to mark boundaries between Aboriginal tribes. It is thought that the practice of marking trees was taught to the first Europeans, and it is plausible that they and not the Aboriginals formed some of the markers remaining on today's landscape. Apparently, trail marker trees were common in pre-settlement times, most now lost to habitat destruction and the practice of removing ill-formed trees in woodlots.

My quest to find marker trees in Southern Ontario led me to spend a winter revisiting my old haunts in Hamilton, Halton and Niagara Regions to no avail. It was only when I started asking friends and fellow botanists that I started to get somewhere. None of them really knew about marker trees before. I just shared what little I had discovered and for some, a little light bulb went on above their heads as they recounted seeing a similar looking tree at such and such place. Some of the leads were dead ends, but some led me to the most magical trees I have ever seen.

A friend told me about seeing markers at her partner's cottage in the Kawarthas. Another told me about a tree in a Caledonia hedgerow. I learned of a grafted, double-trunked Sugar Maple that stood in Binbrook along the Welland River, believed to be a boundary marker between Iroquoian tribes (that is, until some kids started a fire under it 10 years ago and burnt it to the ground). This past summer, my friend and tree colleague, Gerry Waldron, showed me a couple of amazing marker trees in Windsor-Essex. One of them is the most impressive tree I have seen (online or in person) to this day. And last fall I stumbled across a couple of Sugar Maple (*Acer saccharum*) makers less than 100 m apart in north Burlington pointing in the same direction along a path from the Niagara Escarpment to Lake Ontario—the only marker trees I have discovered on my own thus far.

Perhaps early colonists to Southern Ontario modified the smaller trees, but it is thought that, because of the bends, the growth on marker trees is slow and the trees are older than they look. What is clear is that marker trees exist in Southern Ontario, and marking trees was an ingenious practice employed by the Anishinabe (Ojibway) and Haudenosaunee (Iroquois) Peoples of Southern Ontario. There is something so beautiful, sophisticated, and poetic about trail marker trees. It is incredible to think in this age of frenzied, electronic communication, that living, natural messages so simple and practical are still standing on the landscape today—a centuries old tap on the shoulder pointing us the way home. Reaching back to a time before the car, before roads and traffic lights, when sticking to the forest trail was crucial to survival, and a wrong turn could spell danger or death. For these reasons, I would argue that our oldest trail marker trees are the most historically important trees in Ontario today.

I am continuing my search to find and document more trees, seeing it as a project with a 10 or 20-year horizon. Yes, researching and walking old Aboriginal trails is helpful, but again, I have found the best way to find out more about these special trees is just to ask around. Therefore, I am appealing to the FBO [Field Botanists of Ontario] membership: Do you know of a trail marker tree where you live? In your wanderings do you remember seeing trees like this? Do you know of a marker tree that once stood where you live, a document describing it, or someone who may know of a marker tree in your area? If so, I would be very pleased to talk to you by phone or email, please and thank you.

I just learned of a trail marker tree that was chopped down this year, unknowingly, by a property owner along the shoreline of Lake Erie at Port Dover. Once dead, or removed, we lose their untold stories, stories that tell us about who we are and where we come from, stories we can share with future generations about this very special land, and the incredible people that walked and marked its forest paths.

Originally published in the 2011 fall issue of the *Field Botanists of Ontario Newsletter* Volume 23.

Editor's note: The photo used herein may not be copied or shared without the author's permission. For other tree marker articles written by Paul O'Hara see *http://www.blueoak.ca/celebration/.*

What is it?
4. November Wildflowers

Paul Catling, Brenda Kostiuk, Sheila Kuja, and Allen Kuja

Prince Edward County, an island on the north shore of Lake Ontario west of Kingston, has become a destination for naturalists. Spring arrivals of waterfowl at Wellington in late March (and nearby Presqu'ile) and the Bird Banding Station at Prince Edward Point are major attractions. The banding station closes on 31 October, but still it takes winter a while gain a hold. Among the hangers on are the November wildflowers.

Thousands of yellow-flowered plants in the fields are a characteristic feature of scattered places in Prince Edward County in November. These spectacular yellow-flowered plants also sometimes occur at the edge of a lawn or beside a road, but most often they are associated with recently cultivated agricultural land. Most visitors and many residents do not know what they are. The answer is they are mostly either:

(1) Figure 1. Plants that have characteristics of both Field Mustard (*Brassica rapa*) and Rapeseed Mustard (*Brassica napus*) but seem a little closer to the former (see the key below derived largely from Flora of North America—Warwick 2010). It has been said that it is not possible to distinguish the two species on the basis of any single morphological character (e.g Luijten and de Jong 2010). Both plants are often referred to as Canola. The latter name refers to plants derived from *B napus, B. rapa* (*B. campestris*) or *B. juncea* with desirable characteristics including low erucic acid and glucinolates. The selection for desirable traits may have been accompanied by loss of species-distinctive characteristics. Furthermore the two species (*rapa* and *napus*) hybridize and this may have obscured differences between them. Some plants can be identified with certainty using morphology and it has been suggested that they can always be distinguished as a result of having different chromosome numbers (*B. napus* n=19, *B. rapa* n=10).

Since it is not possible to distinguish *B. napus* from *B. rapa* using any single morphological character, a simplified "Libelle Method" has been developed for species identification. It is based on a simple scoring procedure similar to that used in personality tests in popular European magazines like Libelle: a score of either +1 or -1 is given for each trait that is measured. *Brassica napus* has +1 values and

Figure1. Field Mustard (*Brassica rapa*). A, field with numerous plants. B, Allen Kuja beside a plant, C, upper portion of plant showing stalkless, clasping leaves. All photos taken on Conley Road, northeast of Wellington on 10 November 2012 by P.M. Catling and B. Kostiuk.

B. rapa has -1 values. Table 1 includes the outline of scores based on the "Libelle Method" proposed by Luijten and de Jong (2010) with our addition of some weighted scores from Warwick (2010).

(2) Figure 2. Corn Mustard (*Sinapis arvensis*), plants with stalked leaves and reddish colour on the branches where they join the stems. The Chinese Mustard (*Brassica juncea*) is very similar but of the many plants which we examined closely, all were Corn Mustard.

Key to closely related late flowering conspicuous mustards.

1a. Stem leaves clasping the stem with basal auricles 2
1b. Stem leaves not clasping the stem and without basal auricles 3

2a. Flowers not overtopping buds; petals pale yellow, 10-16 mm long; terminal segments of fruit (beak) (5)9-16 mm . . . . . *Brassica napus*
2b. Flowers overtopping or equaling buds; petals deep yellow, 6-11(13) mm long; terminal segments of fruit (beak) 8-22 mm . . . . . *Brassica rapa*

3a. Petals 10-20 mm long; beak of fruit with more than one vein and as long as or less than half as long as body . . . . . *Sinapis* spp. . . 4
3b. Petals less than 10 mm long; beak of fruit with a single vein and much less than half as long as body 5

4a. Fruit densely hispid and with beak as long as body when ripe . . . . *Sinapis alba*
4b. Fruit smooth and with beak less than half as long as body when ripe . . . . . *Sinapis arvensis*

5a. Beak of fruit less than 4 mm long . . . . . *Brassica nigra*
5b. Beak of fruit 7-14 mm long . . . . . *Brassica juncea*

These annuals are often abundant in fields that have been cultivated only a few months previously. By mid-November they are in peak flower. These November blooming plants may be derived from late germinating seed planted the previous spring or from seed released from a planted and harvested crop or from other sources. If one thinks of wild plants as simply those that are not planted, then some or all of these mustards may be wild plants. Those in market gardens, on roadsides and in vacant lots have likely reproduced on their own (i.e. were not planted). These annual mustards thrive in highly disturbed soil, but are not good competitors, so they are absent from pastures, hay and corn fields.

Figure 2. Wild Mustard (*Sinapis arvensis*). A, habitat in a Cabbage field south of Bloomfield. B, Young plant with rugose leaves. C, Flowers and erect pods. D, stalked leaves and young inflorescence. C and D from Conley Road, All photos by P.M. Catling and B. Kostiuk on 11 November 2012.

The wild mustards are not the only November wildflowers. Dandelions are also still blooming in lawns all over the county in mid-November and other less conspicuous blooms are widespread (Table 2). On 13 November 2012 we spent a day looking for them. Our results are indicated in the accompanying table. Here a "site" is defined as a place of occurrence at least 1 km removed from another place of occurrence. The names and order are taken from Crowder et al. (1996). We discovered 32 species of wild plants in flower. Some of these are rare "accidentals," but others are cold-resistant species that are characteristically present late in the year. These plants have some advantages. For example, to some extent they exploit a late season niche when activities on the landscape, such as cutting, cultivating and mowing, have stopped.

Accidentals

Ox-eye Daisy flowers in early summer. One in thousands will produce a flower in November. It could be the result of damage at a particular time in summer followed by regrowth at a particular time and rate. Red Clover, another perennial, may survive until the first few frosts, but then die. Sometimes a few flowers remain in good condition a little later on a mostly dead plant. Canada Goldenrod is more difficult to place in this category. The plants that develop in cracks in pavement and in vacant lots may grow more slowly and are at least a little resistant to cold. These late bloomers are only a fraction of a percentage of the number that dominated the flowers of the countryside 10 weeks earlier.

The real late bloomers

The most conspicuous of the real late bloomers are the fields of thousands of mustards, either Wild Mustard or Field Mustard. Of course the November country landscape with some green from the European grasses in lawns, winter wheat, and European Buckthorn and lilacs along the roads, is not totally without green colour, but browns and greys prevail. A field of bright yellow flowering mustards is certainly a pleasant surprise. A closer look at this habitat will usually reveal other species with inconspicuous flowers such as chickweeds, Shepherd's Purse, and Prostrate Knotweed (Figure 3). A particularly interesting "real late bloomer" is the Common Groundsel. In some places, particularly in high nutrient situations, the plants survive a number of frosts and are abundant and apparently doing well. Other plants, such as Wormseed Mustard mostly bloom in summer, but they can also bloom late, and may be locally abundant.

Habitat

Market gardens where cabbages, onions, pumpkins, gourds etc. are grown may be cultivated or picked over for weeds until late summer, but then the cultivation is no longer necessary since the crops have essentially matured. At this point the late bloomers have a chance. Here it is often possible to find several flowering species in

Figure 3. Late-blooming plants. A, Chickweed (*Stellaria media*). B, Penny Cress (*Thlaspi arvense*). C, Common Mallow (*Malva neglecta*. D, Common Groundsel (*Senecio vulgaris*). E, Dog Mustard (*Erucastrum gallicum*). F, Mouse-Ear Chickweed (*Cerastium fontanum*). G, Shepherd's Purse (*Capsella bursa-pastoris*), H, Prostrate Knotweed (*Polygonum aviculare*). I, Ground Ivy (*Glechoma hederacea*). All photos taken in Prince Edward County on 11 November 2012 by P.M. Catling and B. Kostiuk.

abundance in November, including the various yellow-flowered mustards, Common Groundsel, chickweeds, Common Mallow, and others (Table 2). The latest wildflowers are in agricultural landscapes, lawns and along city streets. All of these habitats are disturbed and the species growing in them have advantages in colonization and dispersal as well as tolerance of harsh conditions but a lack of tolerance of competition. With regard to harsh conditions, Common Groundsel was the first plant worldwide to be shown to have developed herbicide resistance.

Characteristics

The real late bloomers are mostly in the Mustard family, with the Aster family also over-represented. The same families bloom late elsewhere (Garbary and Taylor 2007). In fact 17 of 23 species reported by Garbary and Taylor (2007) in Nova Scotia were recorded in our survey. There are few grasses, the only relatively frequent one being Annual Bluegrass which has just finished flowering by mid-November in many places but still looks very green and fresh. Many of these plants are crops, or weeds of crops, or can be eaten. Almost all are introduced from Europe, and none are rare native species. They are winter annuals because the seeds germinate in the fall but the plants grow to release seed before being killed by winter conditions unlike some winter annuals which start in the fall and complete growth in the following spring.

How late is late?

In Antigonish, Nova Scotia, Garbary and Taylor (2007) found 23 species blooming between 7 and 21 January. That is late! We have seen Common Groundsel blooming in vacant lots in downtown Toronto at Christmas time. A number of the November bloomers in Prince Edward continued into December, including Common Groundsel along streets in Picton.

How and Why?

Of course these plants are frost-resistant (Warwick et al 2000, Robinson et al. 2003, Taylor and Garbary 2003, Garbary and Taylor 2007). The advantage may be in enabling growth after cultivation and continuing after the first few frosts to allow maximum seed development. It is also possible that seed predation is reduced when predators are killed by frosts. The late development may be a result of a western European origin where winter temperatures would be milder, or it may be due to development of late-flowering strains (or both). This late flowering is not clearly a response to recent climate change.

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Table 1. A modified "Libelle Method" for distinguishing *Brassica napus* and *Brassica rapa* based on 22 characters with weighting. *Brassica napus* has plus (+) values and *B. rapa* has minus (-) values. The most frequent character value should be selected.

Basal leaves

1. Colour of the leaves: glaucous (whitish-green) = +1 or grassy-green = -1
2. Hairs on the adaxial (upper) surface of the lower leaves: yes = -1 or no = +1
3. Hairs on the midrib on the abaxial (lower) surface of the leaf: yes = -1 or no = +1
4. Other hairs on the abaxial surface of the leaf: yes = -1 or no = +1
5. Leaf texture: rough = +1 or smooth = -1
6. Lumps on the adaxial surface: yes = -1 or no = +1

Middle leaf (halfway between the bottom leaf and the last leaf before the flowering stalk)

7. Colour of the leaf: glaucous = +1 or grassy-green = -1
8. Hairs on adaxial surface of the leaf: yes = -1 or no = +1
9. Hairs on the midrib on the abaxial surface of the leaf: yes = -1 or no = +1
10. Other hairs on the abaxial surface of the leaf: yes = -1 or no = +1
11. Leaf texture: rough = +1 or smooth = -1

Top leaves (leaves in the lower part in the inflorescence, but not the bract of a flowering stalk)

12. Amount of clasping of the lower leaves in the inflorescence: less than 75% = +1 or more than 75% = -1
13. Presence of at least one leaf completely clasping the stem: yes = -1 or no = +1

Flower measurements

14. Length of the whitish petal base, or claw: 5-6 (4-7) mm = +1 or 3-4 (2-5) mm = -1
15. Sepals: 6.5-9 mm = +3 or 3.4-6.5 mm = -3
16. Petals: 10-16 mm long = +2 or 6-11(13) mm long = -2
17. Petals: pale yellow = +2 or deep yellow = -2
18. Petals: do not overtop buds = +2 or do overtop buds = -2

Other characters

19. Hairs on the stem: yes = -1 or no = +1
20. Shape of the inflorescence at the level of the open flowers: elongated = +1 or compact = -1
21. Overlap of the petals (not in a perfect cross): yes = -1 or no = +1
22. Pleasant floral odour: yes = -1 or no = +1
23. Terminal segment (beak) of fruit: (5)9-16 mm = +2 or 8-22 mm = -2

Table 1. Scientific name, common name, location/notes, and number of sites for late blooming wildflowers observed during a survey on 11 November 2013 in Prince Edward County, Ontario. Prior to the survey there had been several killing frosts but periodic return of daytime temperatures to ca. 0 °C or above.

POACEAE, Grass family

Bromus inermis Leyss., SMOOTH BROME, vacant lot in Picton where mowed earlier (1).

Dactylis glomerata L., ORCHARD GRASS, vacant lot in Picton where mowed earlier (1).

Poa annua L., ANNUAL BLUEGRASS, lawns, paths, vacant lots, recently finished flowering in many places but still producing pollen in Bloomfield, Picton, and north of Wellington (5).

POLYGONACEAE, Knotweed family

Polygonum aviculare L., PROSTRATE KNOTWEED, lawns, fields, vacant lots (15).

CHENOPODIACEAE, Goosefoot family

Chenopodium album L., LAMB'S QUARTERS, gardens, fields (7).

CARYOPHYLLACEAE, Pink family

Arenaria serpyllifolia L., THYME-LEAVED SANDWORT, lawns in Bloomfield and Pieton (3).

Cerastium fontanum Baumg., MOUSE-EAR CHICKWEED, mostly in recently cultivated fields (8).

Stellaria media (L.) Villars, CHICKWEED, fields, lawns, gardens (10).

BRASSICACEAE (CRUCIFERAE), Mustard family

Berteroa incana (L.) DC., HOARY ALYSSUM, only at Highline Mushrooms on Conley Road where apparently regrown from a cut lawn, a very common flowering plant in the summer (1).

Brassica nigra (L.) Koch, BLACK MUSTARD, only at Highline Mushrooms on Conley Road in a wet gravelly area (1).

Brassica rapa L., FIELD MUSTARD, sometimes thousands of plants in fields that were cultivated a few months earlier (11).

Capsella bursa-pastoris (L.) Medikus, SHEPHERD'S PURSE, lawns, especially where grass killed by drought in July, or those not cut for several weeks—also recently cultivated fields (8).

Erucastrum gallicum (Willd.) O.E. Schulz, DOG MUSTARD, gravelly roadside at Mountainview Airport (1).

Erysimum cheiranthoides L., WORMSEED MUSTARD, abundantly flowering in one cabbage field near Bloomfield that had probably been cultivated several weeks earlier (2).

Sinapis arvensis L., WILD MUSTARD, sometimes thousands of plants in fields that were cultivated a few months earlier (14).

Thlaspi arvense L., PENNY CRESS, fields, bad lawns, vacant lots (3).

ROSACEAE, Rose Family

Potentilla argentea L., SILVERY CINQUEFOIL, vacant lots in Picton (2).

FABACEAE (LEGUMINOSAE), Pea family

Trifolium pratense L., RED CLOVER, one flower on a mostly dead plant in Pieton (1).

Melilotus alba Medikus, WHITE SWEET CLOVER, a few flowers on a mostly dead plant on Conley Road (1).

MALVACEAE, Mallow family

Malva neglecta Wallr., COMMON MALLOW, market gardens, lawns and vacant lots (4).

LAMIACEAE (LABIATAE), Mint family

Glechoma hederacea L., GROUND IVY, poor lawn at edge of parking lot in Picton (1).

Nepeta cataria L., CATNIP, disturbed edge of parking lot in Picton (1).

ASTERACEAE, Aster family

Achillea millefolium L., COMMON YARROW, Conley Road, roadsides (2).

Leucanthemum vulgare Lam., OX-EYE DAISY, one flower on roadside at Mountain View Airport (1).

Matricaria chamomilla L., WILD CHAMOMILE, 21 plants abundantly flowering on Conley Rd. (1).

Senecio vulgaris L., COMMON GROUNDSEL, poor lawns, pavement cracks, recently cultivated ground in market gardens (6).

Solidago canadensis L., CANADA GOLDENROD, vacant lots and pavement cracks in Bloomfield, Picton and Wellington (5).

Sonchus asper (L.) Hill, PRICKLY SOW-THISTLE, vacant lot, Picton (1).

Sonchus oleraceus L., COMMON SOW-THISTLE, vacant lot and deserted garden, Picton (2).

Symphyotrichum lanceolatum (Willd.) G.L. Nesom, PANICLED ASTER, in gardens, Picton (1).

Taraxacum officinale F.H. Wigg., DANDELION, lawns everywhere (20).

Tragopogon dubius Scop., GOAT'S BEARD vacant lots and roadsides, Conley Road and Wellington (2).

Another Constance Bay Surprise: *Pelecinus polyturator*

Fenja Brodo

In advanee of another evening of eolleeting and photographing inseets by blaek-lights, and very mueh inspired by the eolourful artiele on grasshoppers by Catling and Kostiuk (*T&L* 49(3):103-113), Ernie and I set off to explore Constanee Bay in the late afternoon on August 15, 2015.

The last time I was here, the evening of June 13, blaek lighting with Diane Lepage, with help from Annie Belair and friend Martin, I barely had time to set up my sheet and light before it beeame too dark to enjoy the woods. We were on sandy soil, I knew, but I had little idea of the plants that formed the undergrowth, exeept for noting the prevalenee of Poison Ivy. That troublesome plant was now virtually everywhere, and in full fruit. This puts a erimp on where we might like to set up our equipment next time.

Ernie made note of the lichens en route and collected several specimens for later lab scrutiny. For the record, we did not see a single crane fly but we were very surprised and delighted to see several of these elegant wasps, *Pelecinus polyturator*, flitting around among the vegetation, about chest height. Occasionally, while cutting the lawn, I have spotted such a wasp drifting by but never have I seen several in one afternoon. We think we saw at least six that afternoon.

Only the female has such an elongated abdomen, the better to dig into the soil to locate a poor June Beetle grub to lay an egg on. Apparently only one egg is laid on each beetle grub and that egg when it hatches kills and eats the grub while transforming itself into several larval instars before pupating under ground and emerging as a fully formed adult. From head to tip of the ovipositor this wasp is about 2" or 5 cm long. She does not fly very fast having rather short wings for such a long abdomen. Somehow she manages to get around and to find her victim deep within the soil. In our region males are rarely encountered and it is likely that the females are parthenogenetic and so able to lay eggs without benefit of a male. Should you catch a *Pelecinus* wasp it might try to sting you with its ovipositor but although you may feel a prick, it has no stinger. It is good to know that June Beetles are being kept under control by this wasp, at least in the Constance Bay area.

2015 Christmas Bird Counts

Ottawa-Gatineau Christmas Bird Count
This year's Ottawa-Gatineau CBC will be held on **Sunday December 20, 2015**. Details of the post-count compilation and dinner will be provided to participants by the sector leaders, closer to the date of the event. For more information, please contact *birdcounts@ofnc.ca*.

35th Dunrobin-Breckenridge Christmas Bird Count
Another traditional local CBC, featuring more rural habitats not that far out of town! This event will be held on Saturday **January 2, 2016**. Please contact count co-ordinator Bruce Di Labio for details at *bruce.dilabio@sympatico.ca*. If you live on the Quebec side, contact Mo Laidlaw at 819-682-5371 or *molaidlaw@videotron.ca*.

We encourage you to come out for these great traditional birding events in the Ottawa-Gatineau area! You don't need to be an "expert" birder to join in—even counting birds at your feeder from the comfort of your own home can be an important contribution. The more participants the better, to discover what's out there in our area during the fall and winter seasons!

Seeing the Tree in the Forest: the Macoun Club's Study-Tree Project

Robert E. Lee

Did you ever have a special, almost secret place in the woods where you could go to be alone and quietly connect with nature in your own way? Maybe some deeply shadowed, mossy forest boulder you could sit on, or a little hidden lookout over valley or lake? We can do a lot for kids in the Macoun Field Club, but it is too much of an active, gregarious group outdoors for us to provide any kind of private retreat. However, we do offer something else that's quite special, and which for many children lets them make that unique connection: their very own "study tree."

Since 1991, each child in our group has been encouraged to look for some special tree in a place we know well, which will be recognized as theirs and which they can revisit and observe during the months and years they are Macoun Club members.

Some become very fond of their trees, and go back to see them even after they have grown up and moved away.

We called them "study trees" in the beginning, with the thought that we would actually make a careful, scientific approach involving educated observation, some useful measurements, and a set of written, dated records.

What is the woods like?
For this project we zeroed in on a 10-acre block of forest within the Macoun Club's 800-acre Study Area in Stony Swamp. Our trees are protected from logging or development by the National Capital Commission.

To an adult with a certain kind of background, the Study-Tree Woods is an aging second-growth hardwood forest with a distant history of livestock pasturing. But to a perceptive child, Solange Courteau, this forest in 1992 was "big, dark, quiet ... green ..... humid ..... pleasant."

Almost half the trees chosen over the years have been Sugar Maples. Ten percent each were

American Basswood and White Ash; 7% each Red Oak and Ironwood (Hop Hornbeam). Large specimens of a dozen other species have been chosen at times: White and Yellow Birches, American Beech, American and Rock Elms, Bitternut Hickory, Butternut, Large-toothed and Trembling Aspens, Bur Oak, White Pine, White Cedar and Red Maple.

Study seedlings and small trees, which do not necessarily represent the composition of the forest, have included White Spruce, Balsam Fir, Blue Beech, Striped Maple and Hemlock, as well as seedlings of Sugar Maple and White Ash.

It all begins with choosing a tree

How does any one tree among the anonymous thousands in the forest catch the eye? Small children are likely to become attached to something that is itself very small, such as a baby tree on the forest floor. Teenagers tend to go for the big ones that reach up into the canopy. Saplings and logs are promising choices, too.

The most important thing a child with a new tree must do is to show it to one of the Macoun Club leaders. We will record for them the precise location without marking

it in any way—no paint, no tags, no numbers. Instead, we commit its unique features to memory, together with very local and personal landmarks, and forever refer to it by the name of the child who chose it.

We immediately provide the tree's common name. That instantly gives the tree an identity. What's next? This isn't something taught in school, and at this point even adults tend to just stand there, looking blank.

The most obvious starting point is to measure the tree—we wrap an ordinary measuring tape around the trunk. From circumference we get diameter, which is more useful—we write it down. Most of our big study trees are about 16 to 18 inches in diameter (45 cm).

From the diameter we can estimate the age of the child's tree, through comparison with similar-sized trees we've already aged by counting the annual rings. Most of these big trees started growing shortly after the Great Fire of 1870, which burned the countryside and threatened the existence of Ottawa itself. They are likely to be close to 145 years old.

Height is a concept more easily grasped than diameter. Sometimes I bring a homemade sighting device for measuring it (based on a right-angled isosceles triangle). We measure fallen trees directly. The big trees range from 70 to 90 feet (27 m) tall.

Next we'll start looking for the subtle little things that people normally don't think about when they attempt to appreciate a tree. Some live right on the trunk, which is the only accessible part of the tree in a forest. There are probably mosses close to the ground, and a scattering of lichens from eye level on up. And while we're looking, some animate creature—a spider, a slug, some ants, or even a tree frog—will likely come to attention.

Finally, we all look up. Maybe there's something unexpected up there—a gap or dark hole in the trunk, or the stub of a major limb broken off in some serious event like the ice storm of 1998.

At the end of their first Macoun Club field trip each child is going to go home having made a tentative connection to some unique element of the natural world. They'll know its proper name, have a concrete sense of its size, and understand that other life forms depend on it.

How the first contact becomes a connection

What transforms a chosen tree into a Study Tree is our practice of going back and looking at it again and again. To examine it only once is merely to collect some facts. What matters, even more than gaining knowledge, is coming to see one's own tree as a familiar individual.

For interest to be sustained the tree must also change in some way. And if it doesn't, then there must be change in us so that we see it differently. That is where the Macoun Club excels. Children are learning all the time, and the knowledge they pick up with us is apt to be relevant to a Study Tree. And—you never know when—something dramatic happens.

One boy, for instance, had chosen a big Bitternut Hickory in the autumn. "My tree is in good health," he thought at the time, though it had both new and old wounds. "The new wound, a big hole 21 feet up, was made by a Pileated Woodpecker." In fact, he said, "I picked this tree because as I was watching, the woodpecker went into the big hole for the night." The following August he took his family out in the woods to see it, and together they stood in the shade of its "magnificent crown of leaves." So little sunshine made its way to the forest floor that they felt the temperature to be several degrees cooler there than outside the forest.

Six weeks later he was back with his family plus the whole Macoun Club, and was as shocked to find that his tree had fallen over! The trunk, he discovered, was hollow and had buckled at the base the way a drinking straw can be folded over. "Some interesting facts could now be determined," he said, recovering his objectivity. "It was measured to be 77 feet tall. Its crown"—that magnificent spread of leaves—"was 42 feet in diameter. There was now a huge hole in the forest umbrella."

(This much all happened between 1991 and 1994. I can quote it accurately because Michael Oda—that was the young boy's name—wrote annual accounts of his Study Tree in the Macoun Club's in-house magazine, *The Little Bear*, with titles like "The Mighty has Fallen" and "Growing Flat Out," for the tree lived two years more after collapsing. The lives of other Study Trees may be found through links online on our home page at *macounfieldclub.ca*)

Study rocks?

In our project, anything that sits still long enough to be revisited has been chosen for "study"— a log, a leaf, a clump of sedges. Even rocks.

I think the appeal of a rock must be that a child can establish the same kind of connection they do with a tree: it becomes a familiar, tangible part of the real, wild world. And in the hands of the Macoun Club, it too reveals a story.

The biggest boulder in the woods, which can hold a dozen kids at a time on its back, is a glacial erratic, carried here during the Ice Age. "My study rock is very cool," wrote 10-year-old Samantha in her initial account of it for the 2015 *Little Bear*. It "looks like it has layers, but the layers are fake. The rock type is gneiss. It came from the bottom of a mountain! There are all sorts of lichens on my study rock."

More can be learned about a Study Tree than a Study Rock, of course. There is the natural history of the species—in what seasons it flowers and fruits, how big it can grow—and its human history. What is its scientific name? Who named it—Linnaeus? What uses do humans put it to?

Some children just naturally search out the known facts in books or online. Others set out to learn *from* their tree. Their field investigations will reveal whether *this* tree is going to flower or not this year; when it makes the buds that will become the flowers; and what particular community of organisms inhabits the nooks and crannies of bark and branch. Each additional organism, in turn, has its own story to tell—its own scientific name, seasons, and life cycle.

Our enquiries along these lines have taken us furthest with a colony of Treehoppers on a small girl's study Leatherwood shrub. Michael's little sister Susan and their

family observed them closely and reported on them in our *Little Bear* for 10 years. Eventually, an entomologist in Missouri heard about them. He wrote to say that Susan's Treehoppers appeared to be related to the *Enchenopa binotata* complex of nine species, each living on a different kind of woody plant and differentiated from the others by its mating calls. But, he said, there was nothing in the literature about them being on Leatherwood, and Susan probably had species number 10. He promptly drove up over the border and recorded their calls here: in his headphones they sounded to me like doves cooing. He confirmed that they were a previously unrecognized species (which could, however, be associated with an existing name, *Enchenopa brevis*).

For those of us with a scientific bent, inspiring stories such as this illustrate the wonderful potential of our study tree project. There is something of significance to be discovered in every tree, and sometimes we succeed in helping Macoun Club members to at least glimpse it. But for most children, the deeper meaning of the tree remains felt rather than comprehended. I have seen a young girl returning to her little spruce tree after a long absence, and tenderly running her fingers over each branch; I can remember a husky boy bending down to brush away a dusting of snow and saying quietly, "Hello log, how are you doing?" These specially chosen trees, then, whether dead or alive—living thing or inanimate object—seem to live in the imagination as well as the forest.

Book Review: Paddlenorth

Murray Citron

Jennifer Kingsley made a presentation about the events in this book at a membership meeting of the OFNC in April, 2014. She is a professional wilderness guide and experienced Arctic traveler. In 2005, she was one of the prime movers in getting a group of six, three young women and three young men, not all of whom knew each other well, to fly to a point on the Baillie River in the Northwest Territories and canoe in fifty days from the landing point to the Baillie's junction with the Back River, and then down the Back through Nunavut to the Arctic Ocean.

The Back, named for Sir George Back, a British officer and explorer who once served with Sir John Franklin, may be the least known of Canada's great river systems. It drains a huge area between the Mackenzie to the west and the Hudson's Bay watershed.

The book begins with the group taking off from Yellowknife with their equipment and supplies, in a floatplane that deposits them by Moraine Lake, on the Baillie. The story begins earlier, with the idea, with the group being assembled, with money being pooled, and things bought: three tents, three canoes, six paddles and spares, food, cooking equipment, clothes, books.

They have to carry everything with them, though they get an occasional treat, a fish caught fresh. Much of the book's interest is in the choices that are made. The details are skillfully interwoven with the narrative, and never become boring. Also interwoven are background events in the lives of the six people. The technique is reminiscent of another travel book, the Odyssey, which begins in the middle of the story, picks up prior events when convenient, and gets the hero home safe after much rowing on dangerous waters and with many lives lost, which is fortunately not the case here. There are, however, personality conflicts, as anybody would expect who has ever travelled with others. It is striking how much Kingsley discloses about herself.

She is a vivid writer. Much of the story is about rapids on the river, which are a match for Scylla and Charibdis, the whirlpool that challenged Odysseus:

> The very last rapid was enormous, a perfect curler set between two gates of rock, 400 meters apart. A black trough of water flashed steeply into a series

> of standing waves nearly twice my height. We took portraits of each other there and ate supper on the spine of one gate, so close to the water we shouted to be heard.

This is from her description of a caribou migration:

> The sound! We hadn't been close enough to hear it before. Thousands of hooves clacked and swished as they hit the ground, and the legs themselves, the feet, added to the din; with each step an adult caribou takes, a tendon slips back and forth over bone, and it fills the air with the sound of fingers snapping.

The best known single incident in the Odyssey is the descent into Hades. Paddle-north can't be expected to match that, but it comes close. There is a picture of Father Joseph Buliard's cabin on Upper Garry Lake, and we are told how the events triggered by his arrival to save souls in 1949 led to the depopulation of the land within ten years. Then the travellers come on traces of a group of schoolgirls who were on the same river just days ahead of them and got into trouble. They are known from then on as the Dead Girls. Travellers in extreme conditions are entitled to a morbid sense of humour.

Much of what happens in Homer is triggered by the Gods on Olympus. People can't do it all themselves. In the twenty-first century Arctic there are airplanes, cell-phones, a Personal Locator beacon, calls to Baker Lake and even to Toronto. Near the end of the trip, there is a meeting with another party, who had a serious accident. Kingsley comments:

> Technology makes us feel as if we weren't so far away after all. It tethers us to the perceived safety of home, which alters the psychology of a trip, but it's more than psychology; George and Barbara were about to be rescued.

Paddlenorth
written by Jennifer Kingsley
Greystone Books, 2014, 232 pages.

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Coming Events

Arranged by the OFNC Events Committee
For further information, please check our website
www.ofnc.ca

PLEASE NOTE: The OFNC website (*ofnc.ca*) contains the most up-to-date information on events. Please check it regularly for changes or additions to events. The Club's Facebook site <*http://www.facebook.com/groups/379992938552/*> and Twitter account <*@OttawaFieldNat*> will also be used to announce last minute changes to events. **Note that we anticipate having several weather and year-dependent events that are not included in *Trail & Landscape* and will only be announced at the last minute via our website, Facebook and Twitter.** These include seasonal events such as Snowy Owl viewing, the spring Snow Goose spectacle, Eardley Eagles and Mudpuppy Night.

ALL OUTINGS: Field trips to natural areas in our region and beyond take place all year round. These events are for OFNC members and prospective members. Prospective members are welcome unless the notice indicates that participation is limited, or that bus travel is involved. Guests should be aware that, in all cases, OFNC liability insurance applies to OFNC members only. Times stated for events are departure times. Please arrive earlier; leaders start promptly. If you need a ride, please contact the leader.

Please bring a lunch on full-day trips and dress according to the weather forecast and activity. Binoculars and/or spotting scopes are essential on all birding trips. Unless otherwise stated, transportation will be by car pool.

MONTHLY MEETINGS: Beginning in February 2014, our monthly meetings will be held at the **Central Experimental Farm in the K.W. Neatby Building, Salon B, at 960 Carling Avenue**. There is ample free parking in the lot on the West side of Maple Drive by Carling Ave., immediately to the east of the main entrance to the Neatby Building.

EVENTS ORIENTED TO ALL AGES: Kids are welcome on all of our trips. We have highlighted particular hikes as "oriented to all ages" as these are most likely to be enjoyed by typical children. Depending on your child(ren)'s interests and stamina, please feel free to bring them along on any events. For events tailored to kids, check out the Macoun Field Club (*http://www.ofnc.ca/macoun/index.php*).

Saturday
10 October
9:30 a.m.
to
1:30 p.m.

GREEN'S CREEK

Leader: Jakob Mueller (*jm890_7@gmail.com* or 613-314-1495)

Meet: NCC Parking Lot P8 off of the Sir George Etienne Cartier Parkway (former the Rockcliffe Parkway). The fastest access to this location would be to enter the parkway from St. Joseph Boulevard—following the parkway as it winds north and then west, you will cross a large bridge (over Green's Creek); the lot will be on your left shortly afterwards. (To reach St. Joseph from the city centre, take Hwy 417 to Hwy 174, exiting at Montreal Road. Turn right (east) at the intersection, cross a bridge and go up a hill to an intersection, where you can turn left onto the parkway.)

Description: Green's Creek is an under-appreciated feature of the city's greenbelt, with a number of interesting natural features. The creek meanders through an unusual deep clay valley. The diversity of plants are here, including the region's only population of Witch Hazel (*Hamamelis virginiana*), a late-blooming shrub more common farther south. For the birders, some fall migrants can be expected. If the weather is warm, we might see a number of reptiles and amphibians.

Sunday
11 October
8:00 a.m.
to
1:00 p.m.

WILD GOOSE CHASE IN THE EAST END

Leader: Richard Waters

Meet: Kelsey's restaurant parking lot, 1910 Saint Laurent Boulevard.

Description: Let's try to repeat the six-goose day we had back on October 12, 2009! Of course we shall have a look for anything else of interest along the way. We aim to see as many geese species as possible. Dress-up and stock-up for the weather. Bring a lunch or snack, binoculars and a scope, if you have one. This is a rain or shine outing.

Tuesday **13 October** **7:00 p.m.** **Social** **7:30 p.m.** **Presentation**	**OFNC MONTHLY MEETING** **BUTTERFLY HUNTING IN THE NATIONAL CAPITAL REGION** **Speaker**: Rick Cavasin **Location**: Salon B, K.W. Neatby Building, Central Experimental Farm, 960 Carling Avenue. **Description**: Blessed with a wide diversity of habitats, the Ottawa-Gatineau area boasts a corresponding wide diversity of butterfly species. However, when searching for some of our rarities, the "where" and the "when" can be critical. Rick will discuss local butterfly hotspots, what's special about them, their noteworthy species, and when to visit. Rick will also cover how to use resources like the Ontario Butterfly Atlas, the butterfly observation email list, and eButterfly. He will also touch on his use of photographic equipment.

Saturday **17 October** **3:00 p.m.** **to** **Sunday** **18 October** **3:00 p.m.**	**FALL BIRD COUNT** This is the annual Fall Bird Count. The post-count compilation (free pizza, coffee, soft drinks and dessert for all participants!) will be held after the count on Sunday, at the Fletcher Wildlife Garden Interpretive Centre from approx. 4:30-8:00 p.m. For more information, and to register your participation in advance, please contact *birdcounts@ofnc.ca**. *** PLEASE NOTE**: *birdcounts@ofnc.ca* was created as a general contact email address for organized bird counts in the Ottawa-Gatineau area. Details re: contact persons and sector will be shared as soon possible.

Saturday **17 October** **7:00 p.m.** **to** **8:30 p.m.**	**WILDLIFE IN SRI LANKA AND OTTAWA—VIDEOS AND PHOTOGRAPHS** **Presenter**: Jeewa Mendis **Location**: Fletcher Wildlife Garden Interpretation Centre, off Prince of Wales Drive. Jeewa is a skilled field naturalist with an amazing amount of patience and a keen eye for photographing unusual subjects. She will be showing her latest photographs and short videos taken in Sri Lanka and near Ottawa.

Saturday
24 October
10:00 a.m.
to
1:00 p.m.

AUTUMN AT PETRIE ISLAND

Leader: Owen Clarkin

Meet: at the Petrie Island Nature Interpretive Centre (start of main trail).

Description: Petrie Island is known for its relatively pristine nature, especially given its proximity to Ottawa. This low island in the Ottawa River contains a well-preserved natural plant community, with good examples of regionally uncommon woody plants such as Hackberry (*Celtis occidentalis*), Black Willow (*Salix nigra*), and Bladdernut (*Staphylea trifolia*) to mention only a few. Join us for a late season hike to see it for yourself. Bring a lunch and dress for the weather. This is a rain or shine event.

Sunday
1 November
8:00 a.m.
to
12:30 p.m.

LATE FALL BIRDING

Leader: Mark Gawn

Meet: Andrew Hayden Park, western-most parking lot. Enter the park at the corner of Carling Avenue and Holly Acres Rd., turn left and go to the furthest parking lot.

Description: By November most of our summer birds are long gone, and winter birds are yet to arrive. It can be cold, and it can be wet, despite which it can be one of the most exciting times of the year, particularly if stormy weather has grounded migrants fleeing the high arctic. The trip will likely focus on the Ottawa River, with the exact route to depend on recent sightings and current weather conditions. It may even involve a visit to one of our more scenic garbage dumps! The trip will proceed rain or shine; please dress appropriately. Binoculars are essential and if you have a spotting scope, do not leave it behind. No meal stops are anticipated, so if you are someone who requires "second breakfast" or "elevensies," bring a snack and beverage.

Tuesday	**OFNC MONTHLY MEETING**
10 November	**THE CHANGING WORLD OF BIRDS IN THE OTTAWA-GATINEAU DISTRICT—A FIFTY YEAR PERSPECTIVE**
7:00 p.m.	**Speaker**: Bruce Di Labio
Social	**Location**: Salon B, K.W. Neatby Building, Central Experimental Farm, 960 Carling Avenue.
7:30 p.m.	**Description**: Bruce will discuss the changes in the status of birds of the Ottawa-Gatineau district over the past 50 years, including recent new species, range extensions, species that are now extirpated, and species to look out for over the next decade.
Presentation	

Tuesday	**OFNC MONTHLY MEETING**
8 December	**ECLIPSES OF THE SUN—IN THE MOON'S SHADOW**
7:00 p.m.	**Speaker**: Howard Simkover
Social	**Location**: Salon B, K.W. Neatby Building, Central Experimental Farm, 960 Carling Avenue.
7:30 p.m.	**Description**: Every couple of years, somewhere on the Earth, the shadow of the moon touches down and sweeps at supersonic speed across oceans and continents. For a brief few minutes, people in the path of this celestial shadow experience perhaps the most spectacular event in nature—a total eclipse of the sun. Howard Simkover will talk is about solar eclipses—what they are, when they happen, why they are perceived to be so rare, and why many thousands of people travel to experience them. Howard Simkover, a lifelong enthusiast of astronomy, was a Producer-Lecturer with the Montreal Planetarium, and also spoke on astronomy at the National Museum of Science & Technology. Howard has travelled the world to see many solar eclipses, and he will share his experiences with words and images.
Presentation	

Sunday	**OTTAWA-GATINEAU CHRISTMAS BIRD COUNT**
20 December	This is one of the area's annual bird counts. To participate, please contact *birdcounts@ofnc.ca*.* Details re: the post-count compilation and dinner will be provided to participants by the sector leaders, closer to the date of the event.
	* **PLEASE NOTE**: *birdcounts@ofnc.ca* was created as a general contact email address for organized bird counts in the Ottawa-Gatineau area. Details re: contact persons and sector will be shared as soon possible.

Saturday
2 January

DUNROBIN-BRECKENRIDGE CHRISTMAS BIRD COUNT

35th Dunrobin-Breckenridge Christmas Bird Count. Another traditional local CBC, featuring more rural habitats than the Ottawa-Gatineau count, and not that far out of town. Please contact count coordinator-compiler Bruce Di Labio for details at *bruce.dilabio@sympatico.ca*. If you live on the Quebec side, contact Mo Laidlaw at 819-682-5371 or *molaidlaw@videotron.ca*.

Tuesday
12 January
7:00 p.m.
Social

7:30 p.m.
Formal program

OFNC MONTHLY MEETING
137th ANNUAL BUSINESS MEETING
Location: Fletcher Wildlife Garden Interpretive Centre
Description: The Council for 2016 will be elected at this meeting. There will be a brief review of the activities in 2015 and a statement of the Club's finances will be given. This is an opportunity to meet most of the Club's executives and the chairs of the various committees and to find out what makes your Club tick.

Saturday
16 January
7:00 p.m.
to
10 p.m.

MEMBERS' PHOTOGRAPHY NIGHT
oriented to all ages
Leaders: Barry Cottam and Hume Douglas
Location: Salon B, K.W. Neatby Building, Central Experimental Farm, 960 Carling Ave.
Description: If you take natural history photos, this is your opportunity to share some of your images with fellow members. The mix of different topics and voices makes for an enjoyable evening. Contributions may be 7-10 minutes long. We can handle most digital presentations (images on a flash-drive), and even conventional slides (with some warning please). We encourage presenters to speak about their images. Please contact Hume Douglas *(humedgl (at) gmail.com)* or Barry Cottam *(b.cottam (at) rogers.com)* so that we can organize the presentations.

Thursday 12 May to Sunday 15 May

POINT PELEE BIRDING TRIP 2016

Leaders: Roy John, John Cartwright and Jon Ruddy

Our club is planning another fantastic birding trip to Point Pelee and Rondeau Provincial Parks with several stops in interesting birding places along the route down and back. We have booked rooms in the newly renovated Leamington Comfort Inn with buffet breakfast service. We shall charter an air conditioned bus with toilet facilities. We expect the cost to be about $500/person. Expect more details in the next issue of *Trail & Landscape* and on the OFNC site. Meantime, to secure your place on this trip, call Martha Farkas at 613 729-4619.

DEADLINE: *Material intended for the January - March issue must be in the editor's hands by 1 November, 2015. Mail your manuscripts to:*

Karen McLachlan Hamilton
2980 Moodie Drive, Nepean, ON, K2J 4S7
H: (613) 838-4943; email: ***hamilton@storm.ca***

ANY ARTICLES FOR TRAIL & LANDSCAPE?

Have you been on an interesting field trip or made some unusual observations? Write up your thoughts and send them to *Trail & Landscape.*

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WEBMASTER's email *webmaster@ofnc.ca*

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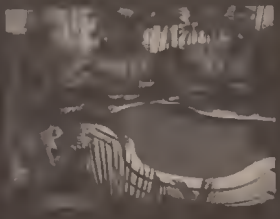

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